Caffeine Extraction from Various Caffeinated Beverages. Bobby Whitaker. Tyler Neavin. In this lab chloroform (ChCl3) was used to extract caffeine from coffee and tea. Chloroform was used due to its unique features. These features include a high molar mass and a high affinity for caffeine. Chloroform was poured through the beverages, allowed to sit, and then siphoned off and repeated three times. Then the chloroform was allowed to evaporate overnight, leaving behind a pure caffeine residue. In our coffee test, 110 mg of caffeine were recorded for every 355 ml (12 oz) of coffee. In our tea test, 40 mg of caffeine were recorded for every 355 ml (12 oz) of tea. Each finding was on the low end of the predicted caffeine spectrum, but still within the acceptable limits. For further research students should consider testing the caffeine content of sodas and energy drinks.

Keywords: Molar mass, chloroform, evaporation.